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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/981,276	10/17/2001	Kave Eshghi	10015123-1	6378

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HEWLETT-PACKARD COMPANY
Intellectual Property Administration
P.O. Box 272400
Fort Collins, CO 80527-2400

EXAMINER

HAMZA, FARUK

ART UNIT	PAPER NUMBER
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2155

DATE MAILED: 02/08/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/981,276

Applicant(s)

ESHGHI ET AL.

Examiner

Faruk Hamza

Art Unit

2155

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 December 2005.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 14/12/05 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

1. This action is responsive to the communication filed on December 09, 2005. Claims 1-16 are now pending.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

2. Claim 1 is rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. If the application servers do not require the requests to carry their entire session information then it is unclear how else the application server will acquire this session information. There is no indication as to where the application server will obtain the session information even though the application server requires this information for it to process the request.

The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 1,3,5-9 and 11-13 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 1 recites the limitation "their entire session state information" in line 8. There is insufficient antecedent basis for this limitation in the claim.

The term "short" in claim 3,6,9 and 12 is a relative term which renders the claim indefinite. The term "short" is not defined by the claim, the specification does not provide a standard for ascertaining the requisite degree, and one of ordinary skill in the art would not be reasonably apprised of the scope of the invention.

Claim 5 and 11 recites the limitation "the property". There is insufficient antecedent basis for this limitation in the claim.

Claim 5 and 11 recites the limitation "the session state information data structure". There is insufficient antecedent basis for this limitation in the claim.

Claim 7 and 13 recites the limitation "its". There is insufficient antecedent basis for this limitation in the claim.

Claim 7 and 13 recites the limitation "the resulting". There is insufficient antecedent basis for this limitation in the claim.

Claim 8 recites the limitation "the session state information" in line 4. There is insufficient antecedent basis for this limitation in the claim.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35

U.S.C. 102 that form the basis for the rejections under this section made in this

Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

The changes made to 35 U.S.C. 102(e) by the American Inventors

Protection Act of 1999 (AIPA) and the Intellectual Property and High Technology Technical Amendments Act of 2002 do not apply when the reference is a U.S. patent resulting directly or indirectly from an international application filed before November 29, 2000. Therefore, the prior art date of the reference is determined under 35 U.S.C. 102(e) prior to the amendment by the AIPA (pre-AIPA 35 U.S.C. 102(e)).

4. Claims 1-3, 8-9 and 14-15 are rejected under 35 U.S.C. 102(e) as being anticipated by Shachor (U.S. Patent Number 6,947,992).

Shachor teaches the invention as claimed including a method for controlling communications between a client and a cluster of servers includes conducting a first communication session over a network between the client and the selected server(See abstract).

As to claim 1, Quatrano teaches a data service system, comprising:

a plurality of web servers, each servicing any request received by the data service System (Column 6, lines 4-36, Shachor discloses plurality of web servers);

a plurality of application servers, each processing any request directed from any one of the web servers (Column 6, lines 4-36, Shachor discloses plurality of application servers);

a session state information managing system called by each of the application servers to allow different application servers to process requests belonging to a single session without requiring the requests to carry their entire session state information, wherein processing of each of the requests requires the session state information of that request (Column 7, lines 7-Column 8, lines 51, Shachor discloses session state information managing system).

As to claim 2, Shachor teaches the data service system of claim 1, wherein the session state information managing system further comprises

a session state information manager called by any one of the application servers when that application server processes a request of a session to (1) provide the session state information of the request to the application server and (2) generate a state reference for a new session state information for that request after the application server has processed the request and generated the new session state information for that request (Column 7, lines 7-Column 8, lines 51);

a store that stores all session state information received by the session state information manager (Column 7, lines 7-Column 8, lines 51).

As to claim 3, Shachor teaches the data service system of claim 2, wherein the state reference generated is unique to the corresponding session state information and is a short and fixed length character string (Column 6, lines 37-56).

As to claim 8, Shachor teaches a session state information managing system in a data service system having a plurality of duplicate application servers, each for processing requests, comprising:

a session state information manager called by any one of the application servers when that application server processes a request of a session to (1) provide the session state information of the request to the application server and (2) generate a state reference for a new session state information for that request after the application server has processed the request and generated the new session state information for that request (Column 7, lines 7-Column 8, lines 51);

a store that stores all session state information received by the session state information manager (Column 7, lines 7-Column 8, lines 51).

As to claim 9, Shachor teaches the session state information managing system of claim 8, wherein the state reference generated is unique to the

corresponding session state information and is a short and fixed length character string (Column 6, lines 37-56).

As to claim 14, Shachor teaches a method of allowing different application servers in a data service system to process requests belonging to a single session, comprising

(A) determining if a request starts a session (Column 7, lines 7-Column 8, lines 51);

if the request initiates the session, then

(B1) processing the request in one of the application servers and sending session state information of the request to a session state information manager (Column 7, lines 7-Column 8, lines 51, Shachor discloses processing the request in one of the application servers);

(B2) receiving a state reference unique to the session state information from the session state information manager and attaching the state reference to the response to the request (Column 7, lines 7-Column 8, lines 51, Shachor discloses receiving state reference unique to the session state information);

if the request does not start the session, then

(C1) retrieving the session state information associated with the request from the session state information manager using a state reference contained in the request (Column 7, lines 7-Column 8, lines 51, Shachor discloses retrieving the session state information);

(C2) processing the request with the retrieved session state information in one of the application servers and generating a new session state information (Column 7, lines 7-Column 8, lines 51, Shachor discloses processing request with the retrieved session state information);

(C3) sending the new session state information of the request to the session state information manager to receive a new state reference unique to the new session state information and attaching the state reference to the response to the request (Column 7, lines 7-Column 8, lines 51, Shachor discloses sending new session state information).

As to claim 15, Shachor teaches the method of claim 14, wherein the step (C1) further comprises the steps of
verifying the session state information retrieved (Column 7, lines 7-Column 8, lines 51);
if the session state information is not verifiable, then performing the step (B 1) (Column 7, lines 7-Column 8, lines 51);
if the session state information is verified, then performing the step (C2) (Column 7, lines 7-Column 8, lines 51).

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

Art Unit: 2155

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

5. Claims 4-7, 10-13 and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shachor as applied above, and further in view of Jindal et al. (U.S. Patent Number 6,405,264) hereinafter referred as Jindal.

Shachor teaches the invention substantially as claimed including a method for controlling communications between a client and a cluster of servers includes conducting a first communication session over a network between the client and the selected server (See abstract).

As to claim 4,10 and 16 Shachor teaches the data service system of claims 3,9 and 14 respectively, wherein the session state information manager generates the state reference (Column 6, lines 37-Column 8, lines 51).

Shachor does not explicitly teach the claimed limitation of using marshaling, cryptographic and encoding algorithm.

However, Jindal teaches marshaling, cryptographic and encoding algorithm (Column 6, lines 14-34; Column 7, lines 43-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shachor by adding marshaling, cryptographic and encoding algorithm, which secure the communication. One would be motivated to do so to enhance the security in communications and protect privacy.

As to claim 5 and 11, Shachor teaches the data service system of claim 4 and 10 respectively (Column 6, lines 37-Column 8, lines 51).

Shachor does not explicitly teach the claimed limitation of marshaling and un-marshal.

However Jindal teaches marshaling and un-marshaling (Column 6, lines 14-34).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shachor by adding marshaling, cryptographic and encoding algorithm, which formats parameters for transmission. One would be motivated to do so to enhance system's communications.

As to claim 6 and 12 Shachor teaches the data service system of claim 4 and 10 respectively (Column 6, lines 37-Column 8, lines 51).

Shachor does not explicitly teach the claimed limitation of cryptographic algorithm.

However, Jindal teaches cryptographic algorithm (Column 7, lines 43-67).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shachor by cryptographic algorithm, which secure the communication. One would be motivated to do so to enhance the security in communications and protect privacy.

As to claim 7 and 13, Shachor teaches the data service system of claim 4 and 10 respectively (Column 6, lines 37-Column 8, lines 51).

Shachor does not explicitly teach the claimed limitation of encoding algorithm.

However, Jindal teaches encoding algorithm (Column 6, lines 44-51).

It would have been obvious to one of ordinary skill in the art at the time of the invention to modify Shachor by adding encoding algorithm, which secure the communication. One would be motivated to do so to enhance the security in communications and protect privacy.

Conclusion

6. The prior art made of record and not relied upon is considered pertinent to the applicant's disclosure.

- McGann et al. (U.S. Patent Number 6,947,982) discloses distributed session services.
- Quatrano et al. (U.S. Patent Number 6,748,420) discloses method for shared access to an application.
- Belkin et al. (U.S. Patent Number 6,701,367) discloses mechanism for enabling session information to be shared cross the network.
- Bergsten et al. (U.S. Patent Number 6,862,689) discloses method for managing session information.

- Becker et al. (U.S. Patent Number 6,557,038) discloses method for maintaining session state.

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Faruk Hamza whose telephone number is 571-272-7969. The examiner can normally be reached on Monday through Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Saleh Najjar can be reached at 571-272-4006. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 886-217-9197 (toll -free).

Faruk Hamza

Patent Examiner

Group Art Unite 2155



SALEH NAJJAR
SUPERVISORY PATENT EXAMINER